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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/775,074	02/01/2001	Gerhard Reichert	1663-I-CIP	8012
45069	7590	09/07/2006	EXAMINER	
FRED ZOLLINGER III P.O. BOX 2368 NORTH CANTON, OH 44720			A, PHI DIEU TRAN	
			ART UNIT	PAPER NUMBER
			3637	

DATE MAILED: 09/07/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/775,074

Applicant(s)

REICHERT, GERHARD

Examiner

Phi D. A

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 09 June 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 23-30, 32, 33, 36-49, 69 and 70 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 26, 27 and 44-49 is/are allowed.
- 6) ☒ Claim(s) 23-25, 28-30, 32, 33, 37-39, 42, 69, 70 is/are rejected.
- 7) ☒ Claim(s) 36, 40, 41 and 43 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claim 39, 42 are rejected under 35 U.S.C. 102(e) as being anticipated by Donaldson (6192651).

Donaldson discloses a simulated divided lite insulating glazing unit (col 1 lines 28-33) having an internal muntin bar, the unit comprising first and second spaced glass sheets spaced apart by a perimeter spacer, the sheets and spacer defining an insulating chamber, an internal muntin bar disposed inside the chamber, the bar extending away from the perimeter spacer to divide the chamber into separate lites to provide a divided-lite appearance to the glazing unit, the bar having an inner muntin grid element (54) and an outer muntin grid element (22, figure 4) having an inner surface and an outer surface, the outer element being in the form of a tube disposed around the inner element to hide the inner element from view on both sides of the unit when the grid piece is installed, the tube having a sidewall and defining a slit (figure 4) that allows the tube to be opened and wrapped around the inner grid element, the slits extending from the inner surface to the outer surface through the sidewall of the tube, the slit in the outer element defines opposed ends, the opposed ends being angled away from each other.

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3. Claim 70 is rejected under 35 U.S.C. 102(e) as being anticipated by Donaldson (6192651).

Donaldson discloses a simulated divided lite insulating glazing unit (col 1 lines 28-33) having an internal muntin bar, the unit comprising first and second spaced glass sheets spaced apart by a perimeter spacer, the sheets and spacer defining an insulating chamber, an internal muntin bar disposed inside the chamber, the bar dividing the chamber into separate lites to provide a divided lite appearance to the unit, the bar having a rigid inner muntin grid element 54) and an outer muntin grid element (22, figure 4), the inner grid element having longitudinal edges and longitudinal sides, the outer element surrounding the inner muntin grid element to hide the edges and sides of the inner element from view on both sides of the unit, the outer element having a longitudinal direction, the outer muntin grid element defining a slit 9figure 4) extending along the longitudinal dimension of the outer element, the slit allowing the outer element to be opened and wrapped around the inner grid element (inherently so), the outer element being fabricated from a non-non-metallic foam material.

4. Claim 69 is rejected under 35 U.S.C. 102(e) as being anticipated by Donaldson (6192651).

Donaldson discloses a simulated divided lite insulating glazing unit (col 1 lines 28-33) having an internal muntin bar, the unit comprising first and second spaced glass sheets spaced apart by a perimeter spacer, the sheets and spacer defining an insulating chamber, an internal muntin bar disposed inside the chamber, the bar dividing the chamber into separate lites to provide a divided lite appearance to the unit, the bar having a rigid inner muntin grid element (54) and an outer muntin grid element (24, figure 4), the outer element being fabricated from

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non-metallic foam material, the outer element being a unitary tube, the inner grid element having longitudinal edges and longitudinal sides, the outer element encloses the inner muntin element to hide the edges and sides of the inner element from view on both sides of the unit.

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 23, 28-30, 32 are rejected under 35 U.S.C. 103(a) as being unpatentable over Martin (3474587) in view of Smith(3308593).

Martin shows a simulated divided lite insulating glazing unit having an internal muntin bar, the unit comprising an internal muntin bar, the bar extending away from the perimeter spacer (16) to divide the glass sheet (14) into separate lites to provide a divided lite appearance to the glazing unit, the internal muntin bar having an inner muntin grid element (22, 44), an outer muntin grid element (20, 18), the outer muntin grid element surrounding the inner muntin grid element, the outer muntin grid element being a collapsible and resilient flexible tube (col 3 line 38-39, lines 70-73) having an inner surface and an outer surface, the collapsible tube being capable of being collapsed upon itself and reopened to an open position wherein the outer muntin grid element defining a longitudinal opening (along the hollow enclosure), the outer muntin grid element surrounding the inner muntin grid element to hide the longitudinal edges and longitudinal sides of the inner muntin grid element from view on both sides of the unit, the outer element is in the form of a continuous tube disposed around the inner element, the outer grid

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element is connected to the inner muntin grid element with a connector (42), the outer element including at least one protruding foot (78, figure 9) that increases the width of the outer element, the foot protruding in a direction perpendicular to the glass sheet, the outer element is resilient.

Martin does not show the unit comprising first and second spaced glass sheets spaced apart by a perimeter spacer, the sheets and the spacer defining an insulating chamber, the bar disposed inside the insulating chamber.

Smith discloses a bar (50) being disposed within an insulating chamber formed by spaced glass sheets and a spacer to form divided lite insulating unit.

It would have been obvious to one having ordinary skill in the art at the time of the invention to modify Martin's structure to show the unit comprising first and second spaced glass sheets spaced apart by a perimeter spacer, the sheets and the spacer defining an insulating chamber, the bar disposed inside the insulating chamber because it would enable the formation of divided lite portions within an insulating glass unit as taught by Smith.

3. Claim 24 is rejected under 35 U.S.C. 103(a) as being unpatentable over Martin (3474587) in view of Smith(3308593) as applied to claim 23 above and further in view of Donaldson (6192651).

Martin as modified shows all the claimed limitations except for the outer element being fabricated from a foam material.

Donaldson discloses foam material (24) forming an outer element.

It would have been obvious to one having ordinary skill in the art at the time of the invention to modify Martin's modified structure to show the outer element being fabricated from a foam material because foam material is a well known material for forming a grid element as it

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has greater heat insulation property and light weight; furthermore, as applicant has not countered that that foam material being a well known material for muntin bar, the statement is thus taken as admitted prior art.

4. Claim 25 is rejected under 35 U.S.C. 103(a) as being unpatentable over Martin (3474587) in view of Smith(3308593) and Donaldson (6192651) as applied to claim 24 above and further in view of Baier (5345743).

Martin as modified shows all the claimed limitations except for the foam material including a desiccant.

Baier discloses within an insulated glass to absorb moisture within the glass chamber.

It would have been obvious to one having ordinary skill in the art at the time of the invention to modify Martin's modified structure to show the foam material including a desiccant as taught by Baier because it would help absorb moisture seeping into the double layer glass panel and thus keeping the panels clear.

5. Claim 33 is rejected under 35 U.S.C. 103(a) as being unpatentable over Martin (3474587) in view of Smith(3308593).

Martin shows a simulated divided lite insulating glazing unit having an internal muntin bar, the unit comprising an internal muntin bar, the bar extending away from the perimeter spacer (16) to divide the glass sheet (14) into separate lites to provide a divided lite appearance to the glazing unit, the internal muntin bar having an inner muntin grid element (22), an outer muntin grid element (20), the outer muntin grid element surrounding the inner muntin grid element, the outer muntin grid element being a collapsible and resilient flexible tube (col 3 line 38-39, lines 70-73) having an inner surface and an outer surface, the collapsible tube being

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capable of being collapsed upon itself and reopened to a tube form (inherently so as the tube is resilient).

Martin does not show the unit comprising first and second spaced glass sheets spaced apart by a perimeter spacer, the sheets and the spacer defining an insulating chamber, the bar disposed inside the insulating chamber.

Smith discloses a bar (50) being disposed within an insulating chamber formed by spaced glass sheets and a spacer to form divided lite insulating unit.

It would have been obvious to one having ordinary skill in the art at the time of the invention to modify Martin's structure to show the unit comprising first and second spaced glass sheets spaced apart by a perimeter spacer, the sheets and the spacer defining an insulating chamber, the bar disposed inside the insulating chamber because it would enable the formation of divided lite portions within an insulating glass unit as taught by Smith.

6. Claim 37 is rejected under 35 U.S.C. 103(a) as being unpatentable over Martin (3474587) in view of Smith(3308593) as applied to claim 33 above and further in view of Donaldson (6192651).

Martin as modified shows all the claimed limitations except for the outer element being fabricated from a foam material.

Donaldson discloses foam material (24) forming an outer element.

It would have been obvious to one having ordinary skill in the art at the time of the invention to modify Martin's modified structure to show the outer element being fabricated from a foam material as taught by Donaldson because foam material is a well known material for forming a grid element as it has greater heat insulation property and light weight; furthermore, as

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applicant has not countered that that foam material being a well known material for muntin bar, the statement is thus taken as admitted prior art.

7. Claim 38 is rejected under 35 U.S.C. 103(a) as being unpatentable over Martin (3474587) in view of Smith(3308593) and Donaldson (6192651) as applied to claim 37 above and further in view of Baier (5345743).

Martin as modified shows all the claimed limitations except for the foam material including a desiccant.

Baier discloses within an insulated glass to absorb moisture within the glass chamber.

It would have been obvious to one having ordinary skill in the art at the time of the invention to modify Martin's modified structure to show the foam material including a desiccant as taught by Baier because it would help absorb moisture seeping into the double layer glass panel and thus keeping the panels clear.

8. Claim 69 is rejected under 35 U.S.C. 103(a) as being unpatentable over Martin (3474587) in view of Smith(3308593) and Donaldson.

Martin shows a simulated divided lite insulating glazing unit having an internal muntin bar, the unit comprising an internal muntin bar, the bar extending away from the perimeter spacer (16) to divide the glass sheet (14) into separate lites to provide a divided lite appearance to the glazing unit, the internal muntin bar having an inner muntin grid element (22), an outer muntin grid element (20), the outer muntin grid element surrounding the inner muntin grid element, the outer muntin grid element being fabricated from a non-metallic material, the inner muntin grid having longitudinal edges and longitudinal sides and the outer muntin grid element

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being a unitary tube that encloses the inner muntin grid element to hide the edges and sides of the inner grid element from view on both sides of the unit.

Martin does not show the unit comprising first and second spaced glass sheets spaced apart by a perimeter spacer, the sheets and the spacer defining an insulating chamber, the bar disposed inside the insulating chamber, the outer element being foam material.

Smith discloses a bar (50) being disposed within an insulating chamber formed by spaced glass sheets and a spacer to form divided lite insulating unit.

Donaldson discloses foam material (24) forming an outer element.

It would have been obvious to one having ordinary skill in the art at the time of the invention to modify Martin's structure to show the unit comprising first and second spaced glass sheets spaced apart by a perimeter spacer, the sheets and the spacer defining an insulating chamber, the bar disposed inside the insulating chamber, the outer element being foam material as taught by Smith because it would enable the formation of divided lite portions within an insulating glass unit as taught by Smith, and having the outer element made of foam as taught by Donaldson would have been obvious to one having ordinary skill in the art as foam material is a well known material for forming a grid element as it has greater heat insulation property and light weight; furthermore, as applicant has not countered that that foam material being a well known material for muntin bar, the statement is thus taken as admitted prior art.

Allowable Subject Matter

9. Claims 26-27, 44-49 are allowed.

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10. Claim 36, 40-41, 43 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Response to Arguments

11. Applicant's arguments with respect to claims 23-30, 32-33, 36-49, 69-70 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. The prior art shows different insulating units with muntin bar elements.

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

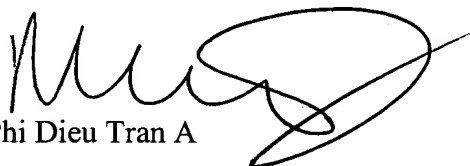
A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

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Any inquiry concerning this communication or earlier communications from the examiner should be directed to Phi D A whose telephone number is 571-272-6864. The examiner can normally be reached on Monday-Thursday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Lanna Mai can be reached on 571-272-6867. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


Phi Dieu Tran A

9/2/06